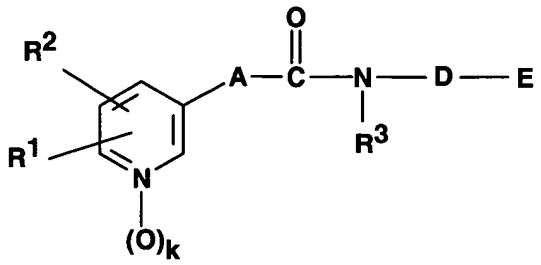
AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (Currently Amended) An imide-substituted pyridylalkane, alkene and alkine acid amide of formula (I)



(I)

wherein the substituents have the following meanings:

R^1 is selected from
hydrogen, halogen, cyano, alkyl, alkenyl, alkinyl, tri-fluoromethyl, cycloalkyl, hydroxyalkyl, hydroxy, alkoxy, cycloalkyloxy, aralkyloxy, alkanoyloxy, alkylthio, alkoxycarbonyl, aminocarbonyl, alkylaminocarbonyl, dialkylaminocarbonyl, carboxy, aryl, aryloxy, arylthio, heteroaryloxy, heteroarylthio, and NR^4R^5, whereby

R^4 and **R^5** are selected independently from each other from hydrogen, alkyl, alkenyl, alkinyl, aralkyl and aryl;

R^2 is selected from
hydrogen, halogen, cyano, alkyl, trifluoromethyl, hydroxy, alkoxy and aralkyloxy;

R^3 is selected from
hydrogen, alkyl, alkenyl, alkinyl, hydroxy, alkoxy and aryloxy;

k is 0 or 1,

A is selected from

alkylene, optionally substituted one to three-fold by alkyl, hydroxy, alkoxy, fluorine, or aryl,

alkylene, wherein a methylene unit is isosterically replaced by O, S, $\mathbf{NR^6}$, CO, SO or SO_2, whereby, with the exception of CO, the isosteric substitution cannot be adjacent to the amine group and $\mathbf{R^6}$ is selected from hydrogen, alkyl, alkenyl, acyl and alkanesulfonyl;

1,2-cyclopropylene;

alkenylene, optionally substituted once or twice by alkyl, hydroxy, alkoxy, fluorine, cyano or aryl;

alkadienylene, optionally substituted once or twice by alkyl, fluorine, cyano or aryl;

hexatrienylene, optionally substituted by C_1-C_3-alkyl, fluorine, cyano or phenyl; and ethinylene;

D is selected from

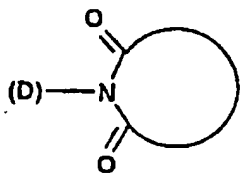
alkylene, optionally substituted once or twice by alkyl, hydroxy, or alkoxy;

alkenylene, optionally substituted once or twice by alkyl, hydroxy, or alkoxy;

alkinylene, optionally substituted once or twice by alkyl, hydroxy, or alkoxy; and

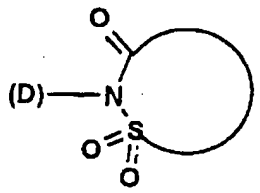
alkylene, alkenylene or alkinylene, in which one to three methylene units is isosterically replaced by O, S, $\mathbf{NR^7}$, CO, SO or SO_2, wherein $\mathbf{R^7}$ is synonymous with $\mathbf{R^6}$, but is selected independently thereof;

E is a cyclic imide of the formula



(E 1)

or



(E 2),

bound over the imide nitrogen atom to D selected from

saturated or unsaturated monocyclic imides with 5 to 7 ring atoms, whereby, aside from the essential imide nitrogen atom, one or two further hetero-atoms can be present selected from N and/or S and/or O in this imide ring;

saturated, unsaturated or aromatic anellated bi-, tri- or tetracyclic imides with 8 to 18 ring atoms of which, aside from the essential imide nitrogen atom, one to three further hetero-atoms can be present selected from N and/or S and/or O;

saturated or unsaturated, bridged bi-, tri- tetra- or pentacyclic imides with 8 to 22 ring atoms of which, aside from the essential imide nitrogen atom, one to three further hetero-atoms can be present selected from N and/or S and/or O;

saturated or unsaturated spirocyclic imides, optionally anellated once or twice and with a total of 9 to 23 ring atoms of which, aside from the essential imide nitrogen atom, one to three further hetero-atoms can be present selected from N and/or S and/or O;

whereby these cyclic imides can be substituted by one to five of the same or different groups selected independently from each other from

halogen, cyano, alkyl, alkylidene, trifluoromethyl, cycloalkyl, cycloalkylidene, phenylalkyl, phenylalkylidene, diphenylalkyl, diphenylalkylidene, triphenylmethyl, aryl, hydroxy, hydroxyalkyl, alkoxy, alkoxy entirely or partially substituted by fluorine, aralkyloxy, aryloxy, naphthyloxy, mercapto, alkylthio, arylthio, heteroarylthio, alkanesulfonyl, arylsulfonyl, heteroarylsulfonyl, sulfo, carboxy, carboxyalkyl, carboxyalkenyl, alkoxycarbonyl,

aralkyloxycarbonyl, nitro, amino, aminoalkyl, mono-alkylamino, di-(alkyl)amino, arylamino, arylalkylamino, heteroarylamino,

saturated or unsaturated, four- to seven-membered heterocycles which can contain one or two hetero-atoms selected from N and/or S and/or O and are either bound directly or bound over a methylene group or a methine group,

monocyclic aromatic five- or six-membered heterocycles which can contain one to three hetero-atoms selected from N and/or S and/or O and are either bound directly or bound over a methylene group or a methine group,

anellated bicyclic, aromatic or partially hydrogenated carbocyclic ring systems with 8 to 12 ring atoms which are either bound directly or bound over a methylene or a methine group,

anellated bicyclic aromatic or partially hydrogenated heterocyclic ring systems with 8 to 12 ring atoms, whereby one to three ring atoms can be selected from N and/or S and/or O and are either bound directly or bound over a methylene or a methine group,

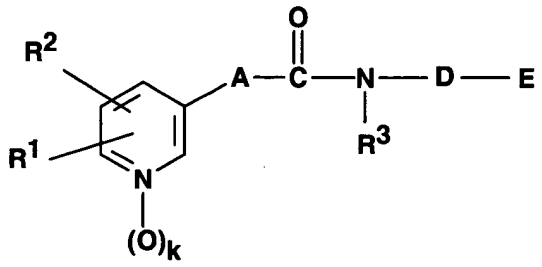
and whereby aryl and heteroaryl residues as substituents of the cyclic imides can be substituted themselves by one to three of the same or different groups selected from

halogen, cyano, alkyl, trifluoromethyl, cycloalkyl, aralkyl, aryl, hydroxy, hydroxyalkyl, alkoxy, alkoxy entirely or partially substituted by fluorine, aralkyloxy, aryloxy, mercapto, alkylthio, arylthio, carboxy, carboxyalkyl, carboxyalkenyl, alkoxycarbonyl, aralkyloxycarbonyl, nitro, amino, aminoalkyl, mono-alkylamino, di-(alkyl)amino and, for two adjacent residues, methylenedioxy;

the cis- and trans-isomer, E- and Z-isomer of the above defined compound, the enantiomer, diastereomer and other isomer of the above defined compound, and their racemic and/or non-racemic mixtures, and the pure endo- and/or exo-isomers of the above defined compound in the case that the imide ring system is bicyclic, and their mixture;

the tautomeric compound in the optional case that E contains a heterocyclic aromatic ring with simultaneous substitution by free hydroxy, mercapto or amino groups; or the acid addition salt, hydrate or solvate of the above defined compound.

2. (Currently Amended) An imide-substituted pyridylalkane, pyridylalkene and pyridylalkine acid amide of formula (I)



(I)

wherein the substituents have the following meanings:

R^1 is selected from
hydrogen, halogen, cyano, C_1-C_6-alkyl, C_3-C_6-alkenyl, C_2-C_6-alkinyl, trifluoromethyl, C_3-C_8-cycloalkyl, C_1-C_6-hydroxyalkyl, hydroxy, C_1-C_6-alkoxy, C_3-C_8-cycloalkyloxy, benzyloxy, C_1-C_7-alkanoyloxy, C_1-C_6-alkylthio, C_2-C_7-alkoxycarbonyl, aminocarbonyl, C_2-C_7-alkylaminocarbonyl, C_3-C_{13}-dialkylaminocarbonyl, carboxy, phenyl, phenoxy, phenylthio, pyridyloxy, pyridylthio, and NR^4R^5, whereby

R^4 and **R^5** are selected independently from each other from hydrogen, C_1-C_6-alkyl, C_3-C_6-alkenyl, C_3-C_6-alkinyl, benzyl and phenyl;

R^2 is selected from
hydrogen, halogen, cyano, C_1-C_6-alkyl, trifluoromethyl, hydroxy, C_1-C_6-alkoxy and benzyloxy;

R^3 is selected from
hydrogen, C_1-C_6-alkyl, C_3-C_6-alkenyl, C_3-C_6-alkinyl, hydroxy, C_1-C_6-alkoxy and benzyloxy;

k is 0 or 1,

A is selected from
C_1-C_6-alkylene, optionally substituted one to three-fold by C_1-C_3-alkyl, hydroxy, C_1-C_3-alkoxy, fluorine, or phenyl;

C_2-C_6-alkylene, in which a methylene unit is isosterically replaced by O, S, **NR^6**, CO, SO or SO_2, whereby, with the exception of CO, the isosteric substitution cannot be adjacent to the amide group and **R^6** is selected from hydrogen, C_1-C_6-alkyl, C_3-C_6-alkenyl, C_1-C_6-acyl or C_1-C_6-alkanesulfonyl;

1,2-cyclopropylene;

C_2-C_6-alkenylene, optionally substituted once or twice by C_1-C_3-alkyl, hydroxy, C_1-C_3-alkoxy, fluorine, cyano or phenyl;

C_4-C_6-alkadienylene, optionally substituted once to twice by C_1-C_3-alkyl, fluorine, cyano or phenyl;

1,3,5-hexatrienylene, optionally substituted by C_1-C_3-alkyl, fluorine, cyano or phenyl; and

ethinylene;

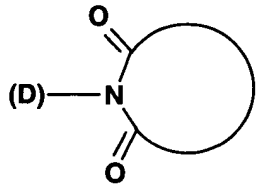
D is selected from
C_2-C_{10}-alkylene, optionally substituted once or twice by C_1-C_6-alkyl, hydroxy, or C_1-C_6-alkoxy;

C_4-C_{10}-alkenylene, optionally substituted once or twice by C_1-C_6-alkyl, hydroxy, or C_1-C_6-alkoxy;

C_4-C_{10}-alkinylene, optionally substituted once or twice by C_1-C_6-alkyl, hydroxy, or C_1-C_6-alkoxy; and

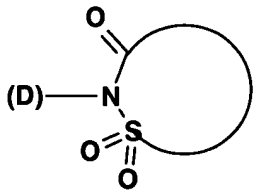
C_2-C_{10}-alkylene, C_4-C_{10}-alkenylene or C_4-C_{10}-alkinylene, in which one to three methylene units is isosterically replaced by O, S, **NR^7**, CO, SO or SO_2, whereby **R^7** is synonymous with **R^6**, but is selected independently thereof;

E is a cyclic imide of the formula



(E 1)

or



(E 2),

bound over the imide nitrogen atom to D selected from

saturated or unsaturated monocyclic imides with 5 to 7 ring atoms of which, aside from the essential imide nitrogen atom, one or two further hetero-atoms can be present selected from N and/or S and/or O;

saturated, unsaturated or aromatic anellated, bi-, tri- or tetracyclic imides with 8 to 18 ring atoms of which, aside from the essential imide nitrogen atom, one to three further hetero-atoms can be present selected from N and/or S and/or O;

saturated or unsaturated, bridged bi-, tri- tetra- or pentacyclic imides with 8 to 22 ring atoms of which, aside from the essential imide nitrogen atom, one to three further hetero-atoms can be present selected from N and/or S and/or O;

saturated or unsaturated spirocyclic imides, optionally anellated once or twice and with a total of 9 to 23 ring atoms of which, aside from the essential imide nitrogen atom, one to three further hetero-atoms can be present selected from N and/or S and/or O;

whereby these cyclic imides can be substituted by one to five of the same or different groups selected independently from each other from

halogen, cyano, C_1-C_6-alkyl, C_1-C_6-alkylidene, trifluoromethyl, C_3-C_8-cycloalkyl, C_3-C_8-cycloalkylidene, phenyl-C_1-C_3-alkyl, phenyl-C_1-C_3-alkylidene, diphenyl-C_1-C_3-alkyl, diphenyl-C_1-C_3-alkylidene, triphenylmethyl, phenyl, hydroxy, C_1-C_6-hydroxyalkyl, C_1-C_6-alkoxy, C_1-C_6-alkoxy entirely or partially substituted by fluorine, benzyloxy, phenoxy, naphthyloxy, mercapto, C_1-C_6-alkylthio, phenylthio, naphthylthio, pyridylthio, C_1-C_6-

alkanesulfonyl, phenylsulfonyl, naphthylsulfonyl, pyridylsulfonyl, sulfo, carboxy, C_2-C_7-carboxyalkyl, C_2-C_7-carboxyalkenyl, C_2-C_7-alkoxycarbonyl, benzyloxycarbonyl, nitro, amino, C_1-C_6-aminoalkyl, mono-C_1-C_6-alkylamino, di-(C_1-C_6-alkyl)amino, phenylamino, phenyl-C_1-C_3-alkylamino, pyridylamino,

saturated or unsaturated, four- to seven-membered heterocycles which can contain one or two hetero-atoms selected from N and/or S and/or O and are either bound directly or bound over a methylene group or a methine group,

monocyclic aromatic five- or six-membered heterocycles which can contain one to three hetero-atoms selected from N and/or S and/or O and are either bound directly or bound over a methylene group or a methine group,

anellated bicyclic, aromatic or partial hydrogenated carbocyclic ring systems with 8 to 12 ring atoms which are either bound directly or bound over a methylene or a methine group,

anellated bicyclic aromatic or partially hydrogenated heterocyclic ring systems with 8 to 12 ring atoms, whereby one to three ring atoms can be selected from N and/or S and/or O and are either bound directly or bound over a methylene or a methine group,

and whereby aryl and heteroaryl residues as substituents of the cyclic imides can be substituted themselves by one to three of the same or different groups selected from

halogen, cyano, C_1-C_6-alkyl, trifluoromethyl, C_3-C_8-cycloalkyl, benzyl, phenyl, hydroxy, C_1-C_6-hydroxyalkyl, C_1-C_6-alkoxy, C_1-C_6-alkoxy entirely or partially substituted by fluorine, benzyloxy, phenoxy, mercapto, C_1-C_6-alkylthio, phenylthio, carboxy, C_2-C_7-carboxyalkyl, C_2-C_7-carboxyalkenyl, C_2-C_7-alkoxycarbonyl, benzyloxycarbonyl, nitro, amino, C_1-C_6-aminoalkyl, mono-C_1-C_6-alkylamino, di-(C_1-C_6-alkyl)amino and, for two adjacent residues, methylenedioxy;

the cis- and trans-isomer, E- and Z-isomer of the above defined compound, the enantiomer, diastereomer and other isomer of the above defined compound, and the racemic and/or non-racemic mixture, and the pure endo- and/or exo-isomers of the above defined compound in the case that the imide ring system is bicyclic, and the mixture;

the tautomeric compound in the optional case that E contains a heterocyclic aromatic ring with simultaneous substitution by free hydroxy, mercapto or amino groups; or a acid addition salt, hydrate or solvates of the above defined compounds.

3. (Previously Presented) The compound according to claim 1 or 2,

wherein the substituents have the following meanings:

R^1 is selected from
hydrogen, halogen, cyano, C_1-C_6-alkyl, trifluoromethyl, ethinyl, hydroxy, C_1-C_4-alkoxy, benzyloxy, C_1-C_4-alkylthio, C_2-C_5-alkoxycarbonyl, aminocarbonyl, C_3-C_9-dialkyl-aminocarbonyl, carboxy, phenoxy, phenylthio and pyridyloxy;

R^2 is selected from
hydrogen, fluorine, chlorine, bromine, C_1-C_4-alkyl, trifluoromethyl, hydroxy, C_1-C_4-alkoxy;

R^3 is selected from
hydrogen, C_1-C_3-alkyl, allyl, hydroxy, C_1-C_3-alkoxy and benzyloxy;

k is 0 or 1,

A is selected from
C_1-C_6-alkylene, optionally substituted once or twice by C_1-C_3-alkyl, hydroxy, fluorine or phenyl;

C_2-C_6-alkylene, wherein a methylene unit is isosterically replaced by O, S, NH, $N(CH_3)$ or CO, whereby, with the exception of CO, the isosteric substitution cannot be adjacent to the amide group; and

1,2-cyclopropylene;

C_2-C_6-alkenylene, optionally substituted once or twice by C_1-C_3-alkyl, phenyl, hydroxy and/or fluorine;

C_4-C_6-alkadienylene, optionally substituted once to twice by methyl or fluorine;

1,3,5-hexatrienylene, optionally substituted by methyl or fluorine; and

ethinylene

D is selected from
C_2-C_8-alkylene, optionally substituted once or twice by C_1-C_3-alkyl or hydroxy;

C_4-C_8-alkenylene, optionally substituted once or twice by C_1-C_3-alkyl or hydroxy;

C_4-C_8-alkinylene, optionally substituted once or twice by C_1-C_3-alkyl or hydroxy; and

C_2-C_8-alkylene, C_4-C_8-alkenylene or C_4-C_8-alkinylene, wherein one to three methylene units are isosterically replaced by O, S, NH, $N(CH_3)$, $N(COCH_3)$, $N(SO_2CH_3)$, CO or SO_2;

E is selected from saturated or unsaturated monocyclic imides with 5 to 7 ring atoms,

saturated, unsaturated or aromatic anellated bicyclic imides,

unsaturated or aromatic anellated tricyclic imides

unsaturated or aromatic anellated tetracyclic imides,

saturated or unsaturated, bridged bi-, tri-, tetra- or pentacyclic imides, and

saturated or unsaturated spirocyclic imides which are optionally benzoanellated once or twice,

whereby these cyclic imides can be substituted by one to five of the same or different groups selected independently from each other from

halogen, cyano, C_1-C_4-alkyl, C_1-C_4-alkylidene, trifluoromethyl, C_3-C_8-cycloalkyl, phenyl-C_1-C_3-alkyl, phenyl-C_1-C_3-alkylidene, diphenyl-C_1-C_3-alkyl, diphenyl-C_1-C_3-alkylidene, triphenylmethyl, phenyl, hydroxy, C_1-C_4-hydroxyalkyl, C_1-C_4-alkoxy, C_1-C_4-alkoxy entirely or partially substituted by fluorine, benzyloxy, phenoxy, naphthyloxy, mercapto, C_1-C_4-

alkylthio, phenylthio, pyridylthio, C_1-C_4-alkanesulfonyl, phenylsulfonyl, naphthylsulfonyl, pyridylsulfonyl, sulfo, carboxy, C_2-C_7-carboxyalkyl, C_2-C_7-carboxyalkenyl, C_2-C_7-alkoxycarbonyl, benzyloxycarbonyl, nitro, amino, C_1-C_4-aminoalkyl, mono-C_1-C_4-alkylamino, di-(C_1-C_4-alkyl)amino, phenylamino, phenyl-C_1-C_3-alkylamino, pyridylamino,

saturated or unsaturated, four- to seven-membered heterocycles which can contain one or two hetero-atoms selected from N and/or S and/or O,

monocyclic aromatic five- or six-membered heterocycles, which can contain one to three hetero-atoms selected from N and/or S and/or O and are either bound directly or bound over a methylene group or a methine group,

anellated bicyclic, aromatic or partially hydrogenated carbocyclic ring systems with 8 to 11 ring atoms which are either bound directly or bound over a methylene group or a methine group,

anellated bicyclic aromatic or partially hydrogenated heterocyclic rings systems with 8 to 11 rings atoms, whereby one to three ring atoms can be selected from N and/or S and/or O and are either bound directly or bound over a methylene group or a methine group,

and whereby aryl and heteroaryl residues as substituents of the cyclic imides can be substituted themselves by one to three of the same or different groups selected from

halogen, cyano, C_1-C_6-alkyl, trifluoromethyl, C_3-C_8-cycloalkyl, benzyl, phenyl, hydroxy, C_1-C_6-hydroxyalkyl, C_1-C_6-alkoxy, C_1-C_6-alkoxy entirely or partially substituted by fluorine, benzyloxy, phenoxy, mercapto, C_1-C_6-alkylthio, phenylthio, carboxy, C_2-C_7-carboxyalkyl, C_2-C_7-carboxyalkenyl, C_2-C_7-alkoxycarbonyl, benzyloxycarbonyl, nitro, amino, C_1-C_6-aminoalkyl, mono-C_1-C_6-alkylamino, di-(C_1-C_6-alkyl)amino and, for two adjacent residues, methylenedioxy.

4. (Previously Presented) The compound according to claim 1 or 2, wherein the substituents have the following meanings:

R^1 is selected from
hydrogen, fluorine, chlorine, bromine, methyl, ethyl, trifluoromethyl, hydroxy, C_1-C_4-alkoxy, phenoxy, methylthio, ethylthio, methoxycarbonyl, aminocarbonyl and carboxy;

R^2 is selected from
hydrogen, chlorine, methyl, hydroxy and methoxy;

R^3 is hydrogen;

k is 0,

A is selected from
C_2-C_6-alkylene, optionally substituted once or twice by hydroxy or fluorine;

C_2-C_6-alkylene, in which a methylene unit is isosterically replaced by O, S, or CO, whereby, with the exception of CO, the isosteric substitution cannot be adjacent to the amide group;

C_2-C_6-alkenylene, optionally substituted by methyl and/or fluorine;

C_4-C_6-alkadienylene, optionally substituted by methyl;

ethinylene;

D is selected from
C_2-C_8-alkylene, optionally substituted by methyl or hydroxy;

C_4-C_8-alkenylene, optionally substituted by methyl or hydroxy;

C_4-C_8-alkinylene, optionally substituted by hydroxy;

C_2-C_8-alkylene, C_4-C_8-alkenylene or C_4-C_8-alkinylene, in which a methylene unit is isosterically replaced by O, NH, $N(CH_3)$, or CO, or an ethylene group is isosterically replaced by a group NH-CO and/or CO-NH, or a propylene group is isosterically replaced by a group NH-CO-NH or NH-CO-O and/or O-CO-NH;

E is selected from
monocyclic imides, anellated bicyclic imides, anellated tricyclic imides, anellated tetracyclic imides, bridged polycyclic imides and spirocyclic imides,

whereby these cyclic imides can be substituted by one to five of the same or different groups selected independently from each other from

halogen, cyano, C_1-C_4-alkyl, trifluoromethyl, C_3-C_8-cycloalkyl, hydroxy, C_1-C_4-hydroxyalkyl, C_1-C_4-alkoxy, C_1-C_4-alkoxy entirely or partially substituted by fluorine, benzyloxy, phenoxy, naphthyloxy, C_1-C_4-alkylthio, phenylthio, pyridylthio, C_1-C_4-alkanesulfonyl, phenylsulfonyl, naphthylsulfonyl, pyridylsulfonyl, sulfo, carboxy, C_2-C_7-carboxyalkyl, C_2-C_7-carboxyalkenyl, C_2-C_7-alkoxycarbonyl, benzyloxycarbonyl, nitro, amino, C_1-C_4-aminoalkyl, di-(C_1-C_4-alkyl)amino, phenylamino, pyridylamino;

benzyl, benzylidene, phenylethyl, phenylethylidene, phenylpropyl, diphenylmethyl, diphenylmethylene, diphenylethyl, triphenylmethyl;

phenyl, indanyl, indenyl, indenylmethyl, naphthyl, naphthyl-methyl, tetrahydronaphthyl, benzocycloheptenyl, tetrahydrobenzocycloheptenyl;

pyrrolidinyl, piperidinyl, morpholinyl, thiomorpholinyl, piperazinyl, hexahydroazepinyl, hexahydrodiazepinyl;

furyl, furylmethyl, thienyl, thienylmethyl, oxazolyl, isox-azolyl, thiazolyl, thiazolylmethyl, imidazolyl, oxadiazolyl, pyridyl, pyridylmethyl, pyrazinyl, pyrimidinyl;

benzofuryl, benzofurylmethyl, benzothienyl, benzothienylmethyl, indolyl, indolylmethyl, indolinyl, oxoindolinyl, dioxoindolinyl, benzooxazolyl, oxobenzooxazolinyl, benzothiazolyl, benzothiazolylmethyl, oxobenzothiazolinyl, benzoimidazolyl, benzoimidazolylmethyl, oxobenzoimidazolinyl, indazolyl, oxoindazolinyl, benzotriazolyl, oxazolopyridyl, oxazolopyridylmethyl, oxodihydrooxazolopyridyl, thiazolopyridyl, oxodihydrothiazolopyridyl, imidazopyridyl, oxodihydroimidazopyridyl, chromanyl, chromanonyl, oxazolopyridyl, oxazolopyridylmethyl, isoquinolinyl, oxodihydroquinolinyl, tetrahydroquinolinyl, oxotetrahydroquinolinyl, benzodioxanyl, quinazolinyl, benzoazepinyl, tetrahydrobenzoazepinyl, benzodiazepinyl, tetrahydrobenzodiazepinyl, benzooxazepinyl, benzothiazepinyl;

and whereby aryl and heteroaryl residues as substituents of the cyclic imides can be substituted themselves by one to three of the same or different groups selected from

halogen, cyano, C_1-C_6-alkyl, trifluoromethyl, C_3-C_8-cycloalkyl, benzyl, phenyl, hydroxy, C_1-C_6-hydroxyalkyl, C_1-C_6-alkoxy, C_1-C_6-alkoxy entirely or partially substituted by fluorine, benzyloxy, phenoxy, mercapto, C_1-C_6-alkylthio, phenylthio, carboxy, C_2-C_7-carboxyalkyl, C_2-C_7-carboxyalkenyl, C_2-C_7-alkoxycarbonyl, benzyloxycarbonyl, nitro, amino, C_1-C_6-aminoalkyl, mono-C_1-C_6-alkylamino, di-(C_1-C_6-alkyl)amino and, for two adjacent residues, and methylenedioxy.

5. (Previous Presented) The compound according to claim 1 or 2,

wherein the substituents have the following meanings:

R^1 is selected from
hydrogen, fluorine, methyl, trifluoromethyl, ethylthio;

R^2 is hydrogen;

R^3 is hydrogen;

k is 0,

A is selected from
ethylene or butylene, optionally substituted by hydroxy or one or two fluorine atoms, or

OCH_2, SCH_2,
ethenylene or 1,3-butadienylene;

D is selected from
C_4-C_6-alkylene, optionally substituted by hydroxy;

C_4-C_6-alkenylene;

C_4-C_6-alkinylene; or

C_4-C_6-alkylene, C_4-C_6-alkenylene or C_4-C_6-alkinylene, wherein one or two methylene units is isosterically replaced by O, NH or CO;

E is selected from
monocyclic imides,

anellated bicyclic imides,

anellated tricyclic imides,

anellated tetracyclic imides,

bridged polycyclic imides, and

spirocyclic imides,

whereby these cyclic imides can be substituted by one to four of the same or different groups selected independently from each other from

halogen, C_1-C_4-Alkyl, trifluoromethyl, hydroxy, hydroxymethyl, methoxy, ethoxy, tert-butoxy, trifluoromethoxy, benzyloxy, phenoxy, phenylthio, pyridylthio, phenylsulfonyl, sulfo, carboxy, C_2-C_7-carboxyalkyl, C_2-C_7-carboxyalkenyl, C_2-C_7-alkoxycarbonyl, benzyloxycarbonyl, nitro, amino, aminomethyl, dimethylamino, diethylamino, phenylamino, pyridylamino;
benzyl, benzylidene, phenylethyl, naphthylmethyl, diphenylmethyl, diphenylmethylene, triphenylmethyl, phenyl, naphthyl;
pyrrolidinyl, piperidinyl, morpholinyl, thiomorpholinyl, piperazinyl, hexahydroazepinyl, hexahydrodiazepinyl;
furyl, furylmethyl, thienyl, thienylmethyl, thiazolyl, thiazolylmethyl, pyridyl, pyridylmethyl;
benzofuryl, benzothienyl, indolyl, indolylmethyl, oxodihydro-indolyl, benzoimidazolyl, benzoimidazolylmethyl, oxodihydrobenzoimidazolyl, benzooxazolyl, oxodihydrobenzooxazolyl, benzothiazolyl, oxodihydrobenzothiazolyl, quinolinyl, quinolinylmethyl, oxodihydroquinolinyl, isoquinolinyl, oxodihydroisoquinolinyl,

and whereby aryl and heteroaryl residues as substituents of the cyclic imides can be substituted themselves by one to three of the same or different groups selected from

halogen, cyano, C_1-C_6-Alkyl, trifluoromethyl, C_3-C_8-cycloalkyl, benzyl, phenyl, hydroxy, C_1-C_6-hydroxyalkyl, C_1-C_6-alkoxy, C_1-C_6-alkoxy entirely or partially substituted by fluorine, benzyloxy, phenoxy, mercapto, C_1-C_6-alkylthio, phenylthio, carboxy, C_2-C_7-carboxyalkyl, C_2-

C_7-carboxyalkenyl, C_2-C_7-alkoxycarbonyl, benzyloxycarbonyl, nitro, amino, C_1-C_6-aminoalkyl, mono-C_1-C_6-alkylamino, di-(C_1-C_6-alkyl)amino and, for two adjacent residues, methylenedioxy.

6. (Previously Presented) The compound according to claim 1, which is selected from the group consisiting of:

N-[4-(2,5-dioxo-3,4-diphenyl-2,5-dihydro-pyrrol-1-yl)-butyl]-3-pyridin-3-yl-acrylamide,

N-[4-(2,6-dioxo-4-phenyl-piperidin-1-yl)-butyl]-3-pyridin-3-yl-acrylamide,

N-[4-(1,3-dioxo-4,5,6,7-tetraphenyl-1,3-dihydro-isoindol-2-yl)-butyl]-3-pyridin-3-yl-acrylamide,

N-[4-(3-benzyl-2,4,5-trioxo-imidazolidin-1-yl)-butyl]-3-pyri-din-3-yl-acrylamide,

N-[4-(1,3,10-trioxo-1,4,5,6,10,10a-hexahydro-acenaphtho[1,8a-c]pyrrol-2-yl)-butyl]-3-pyridin-3-yl-acrylamide,

N-[4-(2,5-dioxo-4,4-diphenyl-imidazolidin-1-yl)-butyl-3-pyri-din-3-yl-acrylamide,

N-[4-(2,5-dioxo-3-phenyl-2,5-dihydro-pyrrol-1-yl)-butyl]-3-pyridin-3-yl-acrylamide,

N-[3-(2,5-dioxo-3,4-diphenyl-2,5-dihydro-pyrrol-1-yl)-propyl]-3-pyridin-3-yl-acrylamide,

N-[4-(3-pyridin-3-yl-acroylamino)-butyl]-2,3:5,6-dibenzobicyc-lo[2.2.2]octan-7,8-dicarboximide,

N-[4-(5-benzyliden-2,4-dioxo-thiazolidin-3-yl)-butyl]-3-pyridin-3-yl-acrylamide,

N-[4-(4-benzyl-2,6-dioxo-piperazin-1-yl)-butyl]-3-pyridin-3-yl-acrylamide,

N-[6-(2,5-dioxo-3,4-diphenyl-2,5-dihydro-pyrrol-1-yl)-hexyl]-3-pyridin-3-yl-acrylamide,

N-[4-(2,5-dioxo-3,4-diphenyl-2,5-dihydro-pyrrol-1-yl)-butyl]-3-pyridin-3-yl-propionamide,

N-[4-(1,3-dioxo-1,3-dihydro-isoindol-2-yl)-butyl]-3-pyridin-3-yl-acrylamide,

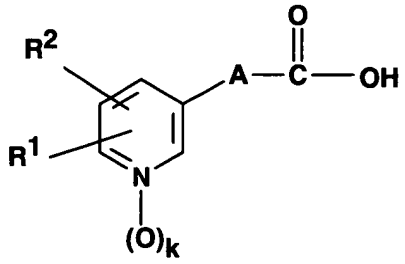
N-[4-(1,3-dioxo-1H,3H-benzo[de]isoquinolin-2-yl)-butyl]-3-(1-oxidopyridin-3-yl)-acrylamide,

N-[6-(1,3-dioxo-1H,3H-benzo[de]isoquinolin-2-yl)-hexyl]-3-pyridin-3-yl-acrylamide,

N-[2-(1,3-dioxo-1H,3H-benzo[de]isoquinolin-2-yl)-ethyl]-3-pyridin-3-yl-acrylamide, and

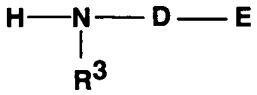
N-[4-(1,3-dioxo-1H,3H-benzo[de]isoquinolin-2-yl)-butyl]-3-pyridin-3-yl-acrylamide.

7. (Currently Amended) Method for the production of compounds according to claim 1 or 2, wherein compounds of formula (I) are synthesized according to method (A) in such a manner that carboxylic acids of formula (II)



(II)

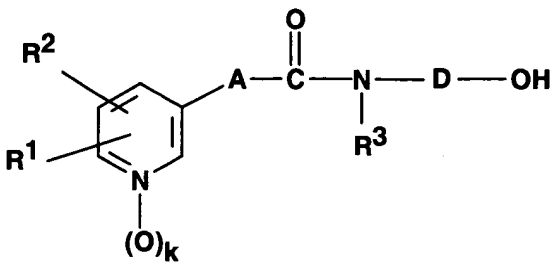
wherein R^1, R^2, A and k have the meanings according to claim 1 or 2 or their reactive derivatives, especially in form of their activated esters, anhydrides, acid halides (preferably acid chlorides) or simple lower alkyl esters, are reacted with compounds of formula (III)



(III)

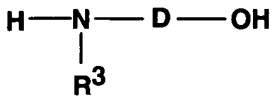
wherein D, E, and R^3 have the meanings according to claim 1 or 2, in form of their free bases or acid addition salts, in a suitable[[,]] solvent, or a mixture of one or more different solvents, at a temperature of -40°C and 180°C, optionally in the presence of condensation agents and/or presence of an auxiliary base, or

according to the variant pursuant to method (B), compounds of formula (I) are produced in that starting compounds of formula (IV)



(IV)

wherein R^1, R^2, R^3, A, D and k have the meaning according to claim 1 or 2 which were obtained by reacting carboxylic acids of formula (II) with amino alcohols of formula (VI),



(VI)

wherein R^3 and D have the meaning according to claim 1 or 2 under conditions as they are described for method (A), are reacted with imides of the formula (V)

(V)

as starting compounds, wherein E is as defined in claim 1 or 2,

under the conditions of the Mitsunobu-reaction in which both starting compounds (IV) and (V), are combined by means of an organophosphor^{III} compound and an aliphatic azo compound in a redox condensation, preferably in one or more aprotic solvents, especially tetrahydrofuran, and under inert gas with formal emergence of water whereby depending on the reactivity of the components, the reaction temperature varies in the range of -20°C to 120°C.

8. (Cancelled)

9. (Cancelled)

10. (Cancelled)

11. (Previously Presented) A pharmaceutical composition comprising one or more of the compounds according to claim 1 or 2 as active ingredient(s) optionally in connection with a pharmaceutically acceptable carrier, next to toxicologically safe adjuvants, optionally in combination with other active ingredients.

12. (Cancelled)

13. (Previously Presented) A pharmaceutical composition comprising one or more of the compounds according to claim 1 or 2 as active ingredient, optionally in connection with a pharmaceutically acceptable carrier next to toxicologically safe adjuvants, optionally in combination with other active ingredients, wherein it is present in a solid, peroral administrable form as a tablet, capsule, coated tablet, optionally as sustained action and/or gastric fluid-resistant preparation or as a liquid, peroral administrable solution, suspension, effervescent tablet, in the form of tabs or sachets, optionally in sustained action form.

14. (Previously Presented) A pharmaceutical composition comprising one or more of the compounds according to claim 1 or 2 as active ingredient, optionally in connection with a pharmaceutically acceptable carrier next to toxicologically safe adjuvants, optionally in combination with other active ingredients, wherein it is present in the form of a suitable injection or infusion preparation together with suitable pharmaceutically acceptable carriers and adjuvants, optionally in sustained action form and/or as a parenteral depot medicinal form or implant or is used in the form of a concentrate, powder or lyophilisate and the parenteral dilution agent is optionally manufactured in the packaging separately therefrom, such that the mixing of the compounds contained therein with a common parenterally applicable dilution agent is possible immediately before use.

15. (Previously Presented) A pharmaceutical composition comprising one or more of the compounds according to claim 1 or 2 as active ingredient, optionally in connection with a pharmaceutically acceptable carrier next to toxicologically safe adjuvants, optionally in combination with other active ingredients, wherein it is present in the form of an inhalation therapeutic agentoptionally together with suitable pharmaceutically acceptable propellants, carriers and adjuvants.

16. (Previously Presented) A pharmaceutical composition comprising one or more of the compounds according to claim 1 or 2 as active ingredient, optionally in connection with a pharmaceutically acceptable carrier next to toxicologically safe adjuvants, optionally in combination with other active ingredients, wherein it is present in the form of a transdermal therapeutic system for systemic treatment.

17. (Previously Presented) A pharmaceutical composition comprising one or more of the compounds according to claim 1 or 2 as active ingredient, optionally in connection with a pharmaceutically acceptable carrier next to toxicologically safe adjuvants, optionally in combination with other active ingredients, wherein it is present in the form of a gastrointestinal therapeutic system (GITS) for systemic treatment.

18. (Previously Presented) A pharmaceutical composition comprising one or more of the compounds according to claim 1 or 2 as active ingredient, optionally in connection with a pharmaceutically acceptable carrier next to toxicologically safe adjuvants, optionally in combination with other active ingredients, wherein it is present in the form of a salve, suspension, emulsion, a balm or plaster or in the form of an externally applicable solution.

19. (Previously Presented) A pharmaceutical composition comprising one or more of the compounds according to claim 1 or 2 as active ingredient(s) optionally in connection with a pharmaceutically acceptable carrier, next to toxicology safe adjuvants, optionally in combination with other active ingredients, wherein it is present in the form of an inhalation therapeutic agent, optionally together with suitable pharmaceutically acceptable propellants, carriers and adjuvants for administration by means of a controlled dosage aerosol or in the form of a dry powder dosage formulation.

20. (Previously Presented) The pharmaceutical composition according to claim 11, wherein it is present in the form of a rectal, genital, or transurethral administrable emulsions, a solution, a liposomal solution, an implant, suppository or a capsule.

21. (Previously Presented) A pharmaceutical composition comprising one or more of the compounds according to claim 1 or 2 as active ingredient, optionally in connection with a pharmaceutically acceptable carrier next to toxicologically safe adjuvants, optionally in combination with other active ingredients, wherein it is present in the form of a composition capable of being applied nasally, otologically or ophthalmologically.

22. (Previously Presented) A pharmaceutical composition comprising one or more of the compounds according to claim 1 or 2 as active ingredient, optionally in connection with a pharmaceutically acceptable carrier next to toxicologically safe adjuvants, optionally in combination with other active ingredients, wherein it is present in the form of a buccally applicable form.

23. (Previously Presented) A pharmaceutical composition comprising one or more of the compounds according to claim 1 or 2 as active ingredient, optionally in connection with a pharmaceutically acceptable carrier next to toxicologically safe adjuvants, optionally in combination with other active ingredients, wherein a dosage unit for administration contains 0.001 to 1000, 2000, 3000, 4000 or 5000 mg single dose active ingredient according to claim 1 or 2.

24. (Previously Presented) A pharmaceutical composition comprising one or more of the compounds according to claim 1 or 2 as active ingredient(s) optionally in connection with a pharmaceutically acceptable carrier, next to toxicology safe adjuvants, optionally in combination with other active ingredients, wherein it is present in the form of an inhalation therapeutic agent, optionally together with suitable pharmaceutically acceptable propellants, carriers and adjuvants, wherein the pharmaceutically acceptable carrier and/or diluent is a propellant aerosol.

25. (Previously Presented) The pharmaceutical composition according to claim 15, wherein the propellant aerosol is tetrafluoroethane and/or heptafluoropropane and/or propane, butane, or dimethyl ether or mixtures thereof.

26. (Previously Presented) The pharmaceutical composition according to claim 15, wherein the propellant aerosol contains surface active adjuvants.

27. (Previously Presented) A pharmaceutical composition comprising one or more of the compounds according to claim 1 or 2 as active ingredient(s) optionally in connection with a pharmaceutically acceptable carrier, next to toxicology safe adjuvants, optionally in combination with other active ingredients, wherein it is present in the form of an inhalation therapeutic agent, optionally together with suitable pharmaceutically acceptable propellants, carriers and adjuvants, wherein it contains glucose and/or lactose as a dry powder dosage formulation.

28. (Cancelled)

29. (Cancelled)

30. (Previously Presented) A pharmaceutical composition comprising one or more of the compounds according to claim 1 or 2 as cytostatic agent or immunosuppressive agent, in combination with a further cytostatic agent or immunosuppressive agent which is not a compound according to claim 1 or 2, wherein it is present in combination with a further

cytostatic agent or immunosuppressive agent, optionally in the form of separate dosage units in the pharmaceutical package.

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)

34. (Cancelled)

35. (Cancelled)

36. (Cancelled)

37. (Cancelled)

38. (Cancelled)

39. (Cancelled)